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Form PTO-1449

PTO/SB/08 (2/92) Speet 1 of 4 Appl. No. 09/920,480 Docket No. GZ 2063.10 Applicant(s) Charles A. NICOLETTE INFORMATION DISCLOSURE STATEMENT

U.S. PATENT DOCUMENTS

Filing Date: August 1, 2001

Examiner	Ref.	Date	Document No.	Name	Class	Subclass	Filing Date (if appropriate)
Initials	No.	07/28/87	4,683,195	Mullis et al.		<u></u>	
W.	1.	07/28/87	4,683,202	Mullis			
1	3.	06/28/88	4,754,065	Levenson et al.		\rightarrow	
MO	4	01/24/89	4,800,159	Mullis et al.			
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- M	6.	11/17/98	5,837,249	Heber-Katz et al.		<u>.l</u>	

FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS

(including author, title, date, pertinent pages, etc.)

Group Art Unit: 1644

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Examiner	Ref.	Title
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	9.	Al-Ramadi, B.K. et al. (1992) "Lack of strict correlation of functional sensitization with the apparent affinity
w		
· \ 3	10.	of MHC/peptide complexes for the TCR 3. Immunol. 133(2):302-3-3. Altman, J.D. et al. (1996) "Phenotypic analysis of antigen-specific T lymphocytes" Science 274(5284):94-
Mus	1	96. CTL Faitance with Improved MHC Class-I Binding Capacity
	11.	96. Bakker, A.B.H. et al. (1997) "Analogues of CTL Epitopes with Improved MHC Class-I Binding Capacity Bakker, A.B.H. et al. (1997) "Analogues of CTL Epitopes with Improved MHC Class-I Binding Capacity Bakker, A.B.H. et al. (1997) "Analogues of CTL Epitopes with Improved MHC Class-I Binding Capacity Bakker, A.B.H. et al. (1997) "Analogues of CTL Epitopes with Improved MHC Class-I Binding Capacity Bakker, A.B.H. et al. (1997) "Analogues of CTL Epitopes with Improved MHC Class-I Binding Capacity
MM	1)	
$\overline{}$	12.	Elicit Anti-Melanoma CTL Recognizing the Wild Type Epinopo India. Bertoni, R. et al. (1998) "Human class I supertypes and CTL repertoires extend to chimpanzees" J.
MEN	l	Immunol. 161:4447-4455. Boczkowski, D. et al. (August, 1996) "Dendritic cells pulsed with RNA are potent antigen-presenting cells
	13.	Boczkowski, D. et al. (August, 1996) Dendriuc cells pulsed with 14 to 15 person of the 14 to 15 person of the 14 to 15 person of the 14 person
Nuc	>	in vitro and in vivo" J. Exp. Med. 184:465-472. Bordignon, C. et al. (September, 1989) "Retroviral vector-mediated high-efficiency expression of PNAS
	14.	Bordignon, C. et al. (September, 1989) "Retroviral vector-mediated right shifted marrow cells" PNAS adenosine deaminase (ADA) in hematopoietic long-term cultures of ADA-deficient marrow cells" PNAS
lus		adenosine deaminase (ADA) in Hernatopoletic long to miscons and a 2750
	1	USA 86:6748-6752. Carter, B.J. (1992) "Adeno-associated virus vectors" Curr. Op. Biotechnol. 3:533-539. Carter, B.J. (1992) "Adeno-associated virus vectors" Curr. Op. Biotechnol. 3:533-539.
· MO	15.	Carter, B.J. (1992) "Adeno-associated virus vectors" Cart. Op. Biotechnical Cards, A. et al. (1997) "Flow cytometric analysis of activation markers on stimulated T cells and their Cards, A. et al. (1997) "Flow cytometric analysis of activation markers on stimulated T cells and their
NUC	16.	Caruso, A. et al. (1997) Flow cytometric analysis of correlation with cell proliferation. Cytometry 27:71-76.
100	<u> </u>	
I was A	17.	Correll, P.H. et al. (November, 1969) Floudition of nathern seems and seems and seems are transfer into multipotential hematopoietic progenitor cells" PNAS USA 86:8912-8916.
		gene transfer into multipoternial memalopototo programme a concerned to

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PTO/SB/08(TE/92) Sheet 22af 4

Form P10	J-144	TRADE MARK	Docket No. GZ 2063.10	Appl. No. 09/920,480			
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	18.		n tumour antigens recognized by T cells	s: new nerspectives for anti-			
MO		cancer vaccines?" Molec. Med. To	oday 3:261-268.				
MP	19.	PNAS USA 88:3155-3159.					
MO	20.	Dharanipragada, R. et al. (1992) ' synthesis of unusual amino acids'	'The absolute configuration of an intern' Acta. Cryst. C48:1239-1241.	nediate in the asymmetric			
M	21.	Dharanipragada, R. et al. (1993) ' Res. 42(1):68-77.	Synthetic linear and cyclic glucagon ar	tagonists" Int. J. Peptide Protein			
MD	22.		of chiral piperazin-2-ones as model pe	eptidomimetics" J. Chem. Soc.			
	23.		Competition inhibition of cytotoxic T-lym	phocyte (CTL) lysis, a more			
MS			date CTL epitopes than induction of an				
MO	24.		ell-surface anchoring of proteins via gly	cosyl-phosphatidylinositol			
, 40	25.		ne-specific ELISPOT assay single cell a	analysis of IL-2, IL-4 and IL-6			
· MC)	producing cells" J. Immunol. Meth	. 160 :181-189.				
w	26.	Garvey, D.S. et al. (1990) "3,4-disubstituted γ-lactam rings as conformationally constrained mimics of peptide derivatives containing aspartic acid or norleucine" <i>J. Org. Chem.</i> 55 (3):936-940.					
w	27.		al restrictions of biologically active pept				
	28.		g approaches in the molecular design	of receptor-selective peptide			
MKD	•		hical and dynamic considerations" Biod				
	29.		ZAP-70 binding specificity to T cell reco				
WO		mours: The tandem SH2 domain: affinity" <i>J. Exp. Med.</i> 181 :375-380	s of ZAP-70 bind distinct tyrosine-base	a activation motifs with varying			
	30.		e bond isosteres: imidazolines in pseu	dopeptide chemistry"			
Mo		Tetrahedron Lett. 29(31)3853-385					
Mys	31.	Kahn, M. et al. (1989) "The incorp synthesis" <i>Tetrahedron Lett.</i> 30(1	oration of β-turn prosthetic units into m 8):2317-2320.	errifield solid phase peptide			
\sim $^{-}$	32.	Karlsson, S. et al. (1986) "Stable	gene transfer and tissue-specific expre	ssion of a human globin gene			
nus	33.	using adenoviral vectors" The EMBO J. 5(9):2377-2385.					
MO	55.	Kazmierski, W. M. et al. (1991) "Asymmetric synthesis of topographically constrained amino acids: synthesis of the optically pure isomers of α , β -dimethyl-phenylalanine and α , β -dimethyl-1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid" <i>Tetrahedron Lett.</i> 32(41):5769-5772.					
	34.						
Mo		Kazmierski, W.M. et al. (1991) "Topographic design of peptide neurotransmitters and hormones on stable backbone templates: relation of conformation and dynamics to bioactivity" <i>J. Am. Chem. Soc.</i> 113:2275-2283.					
- 0	35.		lly restricted cyclic nonapeptides derive	d from L-cysteine and LL-3-			
11/10		amino-2-piperidone-6-carboxylic a	acid (LL-Acp), a potent β-turn-inducing o				
W W		Org. Chem. 50:5834-5838.					
EVANABLES	36.	Nemp, D.S. et al. (1988) "Conform	national analysis of peptide-functionaliz	ed diacylaminoepindolidiones ¹H			
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MAK		Komp D.S. et al. (1988) "A conv	enient preparation of derivatives of 3(S)-amino-10(R)-carbox	cy-1, 6-diaza-	
1,	37.	cyclodeca-2, 7-dione The dilacta	m of L-d, y-diaminopulying acid and b g	glutamic acid: A β-tur	template	
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WW		(n=1 to 4) and α-temp -L-Ala-L- formation" Tetrahedron Lett. 29(39):4935-4938.			
	39.	14000	: J Jamijohyoe that stanii/P SHLUIIUd	ry structures of polyp	eptides. 4.	
	39.	Practical synthesis of 4-(alkylam	IIUO)-3-CASIIO-0-STADICACIOÍO:T: 11001 o a	enes (ben derivatives)	as γ-turn	
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	40.	M-C-on IN/ 1 at al (1988) "Sho	of communications. A simple recoming	e 101 tile rescue of ce 7	iny region :	
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- WW		recombinant gp160" PNAS. US	leno-associated virus as a general tran	sduction vector for m	ammalian	
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.N. (7)	45.	Nagai II et al (1985) "Synthes	sis of a bicyclic dipeptide with the shape	of β-turn central part	" Tetrahedron	
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MO	50.	Parker K C. et al. (1992) "Seq	uence motifs important for peptide bind	ing to the numan win	J 01833 1	
M			tide Binding to MHC Class 1 Molecules			
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3 00	Docket No. GZ 2063.10	Appl. No. 09/920,480	Sheet 4 of 4
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Form PTO-14	149	Docket No. GZ 2063.10	Appl. No. 09/920,480	ECH		
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(use	several sheets if necessary)	Filing Date: August 1, 2001	Group Art Unit: 1644	160		
55.	carcinoembryonic antigen stimula phosphorylation more efficiently t	peptide from a cytotoxic T-lymphocytotes production of TC1-type cytokines han cognate peptide" Int. J. Cancer 8	and increases tyrosine 5:829-838.			
56.	restricted conformation" Int. J. Pe					
MD 57.	10(5):434-439.	navirus vectors for gene expression a				
MO 58.	cytotoxic T cell epitopes" J. Immu	enship between class I binding affinity unol. 153 (12):5586-5592.				
MY 59.	predict epitopes for CTL of huma	Shirai, M. et al. (1995) "CTL responses of HLA-A2.1-transgenic mice specific for hepatitis C viral peptides predict epitopes for CTL of humans carrying HLA-A2.1" <i>J. Immunol.</i> 154 :2733-2742.				
·M 60.	and BZLF-1 proteins detected in	Stuber, G. et al. (1995) "HLA-A0201 and HLA-B7 binding peptides in the EBV-encoded EBNA-1, EBNA-2 and BZLF-1 proteins detected in the MHC class 1 stabilization assay. Low proportion of binding motifs for several HLA class 1 alleles in EBNA-1" <i>Int. Immunol.</i> 7(4):653-663.				
U ₁ 0 61.	Tan, L. et al. (1997) "An improved	Tan, L. et al. (1997) "An improved assembly assay for peptide binding to HLA-B*2705 and H-2K*class I MHC molecules" <i>J. Immunol. Meth.</i> 209 (1):25-36.				
62.	individual cytokine-secreting cells	comparison of ELISPOT and ELISA-law tymphokine Cytokine Res. 13(4):2	59-263.			
63.		Valmori, D. et al. (2000) "Induction of potent antitumor CTL responses by recombinant vaccinia encoding a melan-A peptide analogue" <i>J. Immunol.</i> 164 (2):1125-1131.				
· 40 64.		van der Burg, S.H. et al. (1996) "Immunogenicity of peptides bound to MHC class I molecules depends on the MHC-peptide complex stability" <i>J. Immunol.</i> 156 :3308-3314.				
65.	Ware, C.F. et al. (1983) "Recognition of HLA-A2 mutant and variant target cells by an HLA-A2 allospecific human cytotoxic T lymphocyte line" J. Immunol. 131(3):1312-1317.					
MO 66.	Wilchek, M. et al. (1988) "The avi 32.	Wilchek, M. et al. (1988) "The avidin-biotin complex in bioanalytical applications" Anal. Biochem. 171:1-				
ND 67.	Ying, H. et al. (July 19, 1999) "Ca 827.	ncer therapy using a self-replicating l	RNA vaccine" Nat. Med. !	5(7):823-		
68.	Zabrocki, J.et al. (1988) "Conform cis amide bond" J. Am. Chem. So	national mimicry. 1. 1,5-disubstituted ii. 110:5875-5880.	tetrazole ring as a surrog	gate for the		
M) 69.		glucagon antagonists and partial ag	onists" Int. J. Pep. Proteir	n Res.		
(U) 70.	Zweerink, H.J. et al. (March 1, 19	93) "Presentation of endogenous per ort deletion mutant T2 cells" <i>J. Immu</i>	otides to MHC class I-rest	tricted		

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PTO/SB/08A (10-01)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Compl	ete if Known
Application Number	09/920,480
Filing Date	August 1, 2001
First Named Inventor	Charles A NICOLETTE
Art Unit	1644
Examiner Name	Not Yet Assigned
Attorney Docket Number	GZ 2063.10

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number – Kind Code ² (if known)	Publication Date MM-DD-YY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
MO	1	US-5,695,937	12/9/97	Kinzler et al.	Dro	
MO	2	US-5,869,445	2/9/99	Cheever, et al.	DECEIVE	
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		FOREIGN PAT	ENT DOCU	MENTS		
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	_5	FR 2,757,169	6/19/98	Institute Nat'l de la Sante et de la Recherche Medical InsermEstabliss Public a Caract Scient et Tech		
MD	6	WO 99/02183	1/21/99	CTL Immunotherapies Corp.		
MO	7	WO 00/20457	4/13/0	Genzyme Corp.		_
M	8	WO 97/35035 (*)	3/20/97	Genzyme Corp.		

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^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/08B (10-01)

Approved for through 10/31/2002. OMB 0651-0031

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Application Number

First Named Inventor

Filing Date

Art Unit

Complete if Known

09/920,480

August 1, 2001

Charles A. NICOLETTE

1644

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Examiner Name GZ 2063.10 Attorney Docket Number 2 of Sheet

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
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		BLOOM at al. "Identification of tyrosine-related protein 2 as a tumor rejection antigen for the B16		١
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	-	ROBCHARDT et al. "Small molecule-dependent genetic selection in stochastic nanodroplets as a		Ė
	3	means of detecting protein-ligand interactions on a large scale" Chem. Biol. (1997) 4(12):961 968 (*)	<u> </u>	ļ
- 1		ROUCHARD et al. "Molecular characterization of a human tyresinase-related-protein-2 cDNA.	TECH CENTER 1500/2800	k
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104	 	FORBES LE "The incidence of breast cancer." The global burden, public health considerations"	500/2800	
MAN	8	Seminars in Oncology (1997) 24/1) Suppl 1 pp. S1-20-S1-35		
100		CISU at al. "Identification of protein coding regions by database similarity search" Nature Genetics		_
0.1	9			`
1 .	10	GREENI EE R.T. et al. "Cancer Statistics. 2001". CA Cancer J Clin (2001) 51(1):15-36		
MO		KAWAKAM et al. "Identification of a human melanoma antigen recognized by tumor-infiltrating	RS), title of the article (when appropriate), title of the item (took, magazine, journal, volume-issue number(s), publisher city and/or country where published we expansion of high-or low-avidity_cytotoxic T_lymphocytes and reparted protein 2 as a tumor rejection antigen for the B16 (3):453 (*) e-dependent genetic selection in stochastic nanodroplets as a teractions on a large scale" Chem. Biol. (1997) 4(12):961-968 (*) e-dependent genetic selection in stochastic nanodroplets as a teractions on a large scale" Chem. Biol. (1997) 4(12):961-968 (*) e-dependent genetic selection in stochastic nanodroplets as a teractions on a large scale" Chem. Biol. (1997) 4(12):961-968 (*) e-dependent genetic selection in stochastic nanodroplets as a teractions on a large scale" Chem. Biol. (1997) 4(12):961-968 (*) e-dependent genetic selection in stochastic nanodroplets as a teractions on a large scale" Chem. Biol. (1997) 4(12):961-968 (*) e-dependent genetic selection in stochastic nanodroplets as a teractions on a large scale "Chem. Biol." (1994) 219(1-2):127-134 (*) releasing hormone-related polypeptides in rabbit prostate and bibit hypothalamus" J. Endocrinology (1989) 120: 31-36 entral to cancer immunotherapy?" Mol. Med. (January 1999) **PACK SCALE (1996) 18(4):197-209 **Entral to cancer: The global burden, public health considerations" (*) **Suppl. 1. pp. S1-20-S1-35 **Leoding regions by database similarity search" Nature Genetics **a human melanoma antigen recognized by tumor-infiltrating of tumor rejection" PNAS USA (1994) 91(9):3515-3519 (*) **a human melanoma antigen recognized by tumor-infiltrating of tumor PNAS USA (1994) 91(9):3515-3519 (*) **a HER-2/net Eiptope (GP2) to HLA-A2.1 is due to a lack of teptide" J. Biol. Chem. (1999) 274:36422-36427 **asis of cancer immunotherapy by cytotoxic T lymphocytes" J. Mol. **LER "Genomics. gene expression and DNA arrays" Nature (2000) **to the nation on the status of cancer, 1973-1997, with a special ter (2000) 88(10):2398-2424 of new HER2/neu-derived peptide	
MARAN] 11	hymphocytes associated with in vivo tumor rejection" PNAS USA (1994) 91:6458-6462 (*)		
V (J-)	1	KAWAKAMI V et al. "Cloping of the gene coding for a shared human melanoma antigen recognized		
KNOW	12	by outologous T cells infiltrating into tumor" PNAS USA (1994) 91(9):3515-3519 (*)		
	100	WHUNE LL et al. "Poor Binding of a HER-2/neu Fintone (GP2) to HLA-A2.1 is due to a lack of		
MC	13	intersections with the center of the pentide" J. Biol. Chem. (1999) 274:36422-36427		
		Interactions with the center of the popular basis of cancer immunotherapy by cytotoxic T lymphocytes" J. Mol.		
Mah) ¹⁴			
	Cite No.¹ serial symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher city and/or country where published efficacy for adoptive immunotherapy* PNAS USA (1996) 93(9):4102-4107 (*) BLOOM et al. "Identification of tyrosine-related protein 2 as a tumor rejection antigen for the melanoma" J. Exp. Med (1997). 185(3):453 (*) BORCHARDT et al., "Small molecule-dependent genetic selection in stochastic nanodroplet means of detecting protein-ligand interactions on a large scale* Chem. Biol. (1997). 44(12):66. BOUCHARD et al., "Molecular characterization of a human tyrosinase-related-protein-2 cDN Patterns of expression in melanocytic cells* Eur. J. Biochem (1994). 219(1-2):127-134 (*) COCKLE, S.M., et al. "Thyrotrophin-releasing hormone-related polypeptides in rabbit prostal semen are different from those in rabbit hypothalamus" J. Endocrinology (1989) 120: 31-36 COLACO "Why are dendritic cells central to cancer immunotherapy?" Mol. Med. (January 16, Today:14-17 (*) FISK, B. et al. "Changes in an HER-2 peptide upregulating HLA-A2 expression affect both conformational epitopes and CTL recognition: Implications for Optimization of antigen prese and tumor-specific CTL induction* Immonol. (1996) 18(4):197-209 FORBES, J.F. "The incidence of breast cancer: The global burden, public health consideral Seminars in Oncology (1997) 24(1), Suppl. 1. pp. S1-20-S1-35 GISH et al., "Identification of protein-coding regions by database similarity search." Nature G (1993) 3:266-273 (*) GREENLEE, R.T. et al. "Cancer Statistics, 2001". CA Cancer J Clin (2001) 51(1):15-36 KAWAKAMI et al., "Identification of a human melanoma antigen recognized by tumor-infiltra lymphocytes associated with in vivo tumor rejection* PNAS USA (1994) 91:6458-6462 (*) KAWAKAMI, Y. et al., "Cloning of the gene coding for a shared human melanoma antigen interactions with the center of the peptide* J. Biol. Chem. (199	LOCKHART D.L. and E.A. WINZELER "Genomics, gene expression and DNA arrays" Nature (2000)	T	
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	10	QUES 1. A at al. "The annual report to the nation on the status of cancer, 1973-1997, with a special		
MIC	† 10	continuo on colorectal cancer." Cancer (2000) 88(10):2398-2424	1.	
*	1	DONOS IN V. et al. "Identification of new HER2/neu-derived pentide epitopes that can elicit specific	T	
k . ~		CTL against autologous and allogeneic carcinomas and melanomas" J. Immunol. (1999) 163:1037-	-	
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MAN 236	SRINIVAS P. et al. "Proteomics	in Early Detection of Cancer" Clin. Chem. (2001)	17(10):1901-1911
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26	Mol. Med. (August 1997) Today	st mammary tumor growth by vaccination with full-	ength, modified
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27	7HALet al. "Cloning and charac	terization of the genes encoding the murine homoto	ogues of the human
	melanoma antigens MART1 and	d gp100" <i>J. Immunol</i> (1997). 20(1) :15-25 (*)	
28	ZÜGEL, U. et al. "Termination o	if peripheral tolerance to a T cell epitope by heterod	clitic antigen
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	6.	Colaco, "W (January 19	hy are dendritic ce	lls ce	ntral to cancer in	nmunothera	py?" <i>Mol. M</i>	sed. Toda	y:14-17
7. Gish et al., "Identification of protein coding regions by database similarity search" Nature Genetics 3:266-273 (1993).							ature		
	8. Kawakami et al., "Cloning of the gene coding for a shared human melanoma antigen recognized by autologous T cells infiltrating into tumor" PNAS USA 91(9):3515-3519 (1994).						9		
	9.	Kawakami infiltrating (1994).	et al., "Identification lymphocytes assoc	on of a	a human melano with <i>in vivo</i> tum	ma antigen or rejection	recognized b	y tumor- 1 91:6458	-6462
	10.	Lindauer et J. Mol. Med	al., "The molecula d. 76:32-47 (1998).	ar basi	s of cancer imm	unotherapy	by cytotoxic	T lymphe	ocytes"
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Sheet 2 of 2 Form PTO-1449 Docket Number 159792006300 Application Number 09/249,272 INFORMATION DISCLOSURE CITATION Applicant IN AN APPLICATION Charles A. NICOLETTE (Use several sheets if necessary) Filing Date Februaury 11, 1999 Group Art Unit 1648 OTHER DOCUMENTS (including author, title, Date, Pertinent Pages, Etc.) Examiner Ref. Title **Initials** No. Rosenberg et al., "Immunologic and therapeutic evaluation of a synthetic peptide vaccine for 12. the treatment of patients with metastatic melanoma" Nature Med. 4(3):321-327 (1998). Salgaller et al. "Recognition of multiple epitopes in the human melanoma antigen gp100 by 13. peripheral blood lymphocytes stimulated in vitro with synthetic peptides" Cancer Res. *55*:4972-4979 (1995). Schena et al., "Parallel human genome analysis: Microarray-based expression monitoring of 14. 1000 genes" PNAS USA 93:10614-10619 (1996). Shepherd et al., "Preparation and screening of an arrayed human genomic library generated 15. with the P1 cloning system" PNAS USA 91:2629-2633 (1994). Tam, "Synthetic peptide vaccine design: Synthesis and properties of a high-density multiple 16. antigenic peptide system" PNAS USA 85:5409-5413 (1998). Türeci et al., "Serological analysis of human tumor antigens: Molecular definition and 17. implications" Mol. Med. Today 3(8):342-349 (August 1997). Zhai et al., "Cloning and characterization of the genes encoding the murine homologues of 18. the human melanoma antigens MART1 and gp100" J. Immunol. 20(1):15-25 (1997). 19. Zügel et al., "Termination of peripheral tolerance to a T cell epitope by heteroclitic antigen analogoues" J. Immunol. 161:1705-1709 (1998).

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Application Numb r	09/920,480			
Filing Date	August 1, 2001			
First Named Inv nt r	Charles A. NICOLETTE			
Art Unit	1644			
Examiner Name	Not Yet Assigned M. DIR			
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